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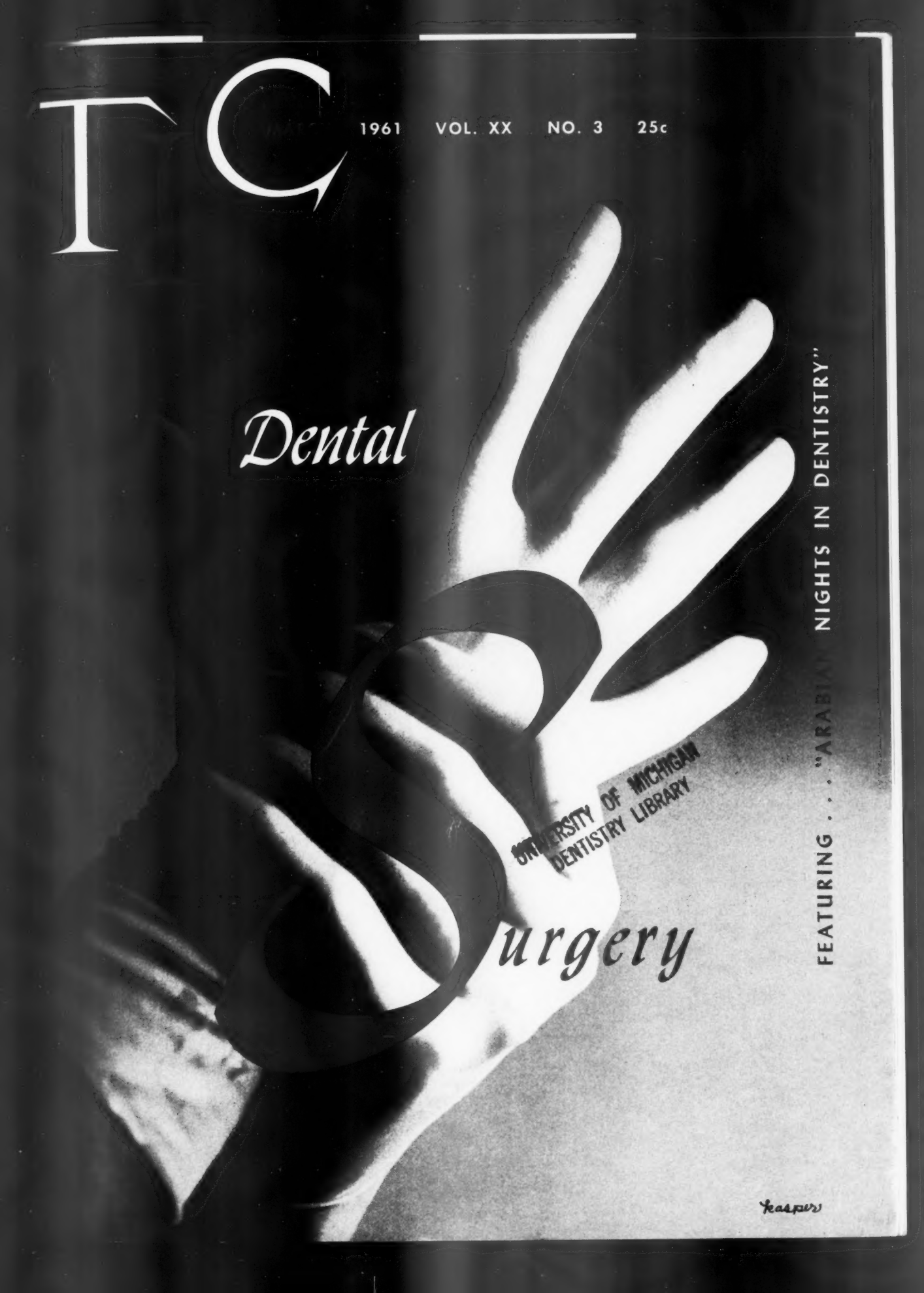
Dental Surgery



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FEATURING . . . "ARABIAN NIGHTS IN DENTISTRY"

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TIC

A MAGAZINE FOR
DENTISTS
DENTAL HYGIENISTS
DENTAL ASSISTANTS

Editor,
Joseph Strack

Contributing Editors,
Arthur S. Levine, D.D.S.
Joseph Murray, D.D.S.

Art Director,
Edward Kasper

March 1961 Vol. XX No. 3

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HUMAN FACTORS AND THE DENTIST

A dentist should sit to work and stand to rest.

A dentist should have equipment which will reduce materially his arm and body movements.

A dentist's patient should be in a semi-reclining position, instead of a vertical sitting position.

A dentist should have a chair-side assistant and other well-trained help who will relieve him of all of the "chores" of his practice.

These are some of the strongest recommendations from a continuing study being conducted by the University of Southern California's School of Dentistry on all of the human factors which surround a dentist at his work.

This research, conducted by the Human Factors Research Division, has been in progress for more than two years and is believed to be the first of its scope in the history of the profession.

Not only are USC educators involved in this probing, but also architects, psychologists, design experts, and specialists in the fields of both medicine and physical education.

Consideration is being given to the dentist, his patient, his operating layout; to his chair-side assistant and other office help; his instruments, his skills, even his dental chair and the means by which he bills his patients for his professional service.

Prime purpose of all this research is: to increase the dentist's own productivity to meet ever-growing demands for his public health service in an era of exploding population trends.

With support from dental equipment manufacturers, USC has created in its School of Dentistry a unique laboratory and fitted it with $50,000 worth of dental equipment. Even though the laboratory has been "built," in a sense it will never be "completed." Walls of the laboratory can be moved or removed, and interior, separating walls can be rearranged in a study of space utilization. "Like a model railroad, we'll never really finish it," said one researcher.

In this connection, the Human Factors Research Division developed a one-quarter-inch scale model of a dentist's office, using a back-to-back approach for two operating areas, with a pass-through for the dentist to make his way from one to the other while working.

The picture on Page 1 shows student James Loos posing with another student, Harvey Colman, as the patient, and dental assistant Yvonne Gideon in one of the three elaborate operating areas within the $50,000 Human Factors Research Division laboratory. Following a foremost recommendation by the HF researchers, student Loos sits as he operates.

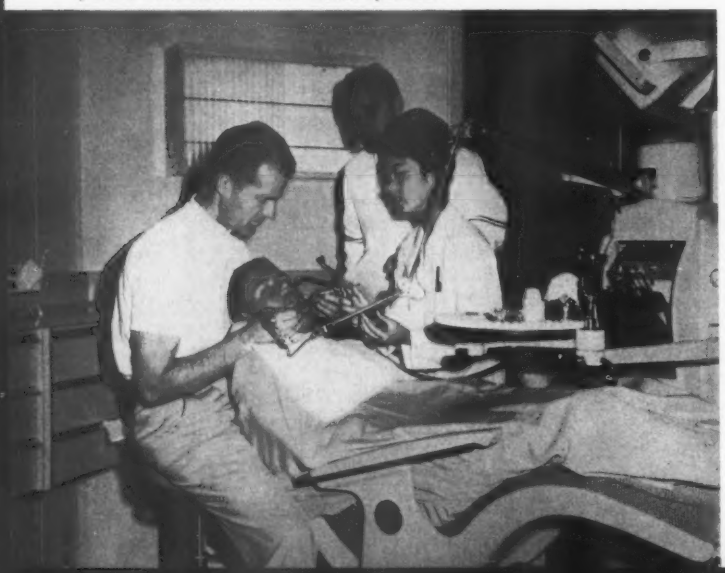
In the scene above, Dr. Rex Ingraham, standing, head of the Department of Operative Dentistry at the University of Southern California School of Dentistry, checks x-rays with student James Pugh. Note the dental cabinet at the right. It is replaced in the more modern surroundings of the HF laboratory with pre-set trays of instruments.

With regard to the sit-to-work-stand-to-rest proposal which has come out of the Human Factors research, USC recommends that the dentist sit at his work over a patient who is reclining in a contoured chair at approximately a 50-degree angle—as a means of resting and relaxing both practitioner and patient.

This recommendation was based on a static Human Factors study conducted in the office of Dr. Sanford Golden of Westwood Village, Los Angeles, who is one of the principal investigators for the HF project.

Dr. Golden is credited with the design of the Euphorian Curve Chair, which cradles the patient in a relaxed and fixed position on a single, full-length foam rubber cushion that conforms to the shape of a scientifically contoured, moulded, glass-fibre shell.

Note the contour of the chair in which student Gary Simmons relaxes in this posed picture, while student Archie French operates.



Such a chair, it has been determined, provides an even distribution of the patient's body weight, discourages the patient from slumping, and keeps him in a good operating position.

The study indicated that a patient, sitting upright in one of the old dental chairs, would tire in from seven to 30 minutes. But only minor fatigue resulted when the same patient reclined in a contoured chair and in semi-prone (50 degrees from vertical) position for as long as three hours.

It was further determined in the case of the practitioner that circulation was benefited when the dentist sat at his work. Diastolic blood pressure, a sensitive index of circulatory function, was noticeably increased during prolonged static work in the standing position.

"We know," a Human Factors researcher has stated, "that when a patient is relaxed, and not tired and nervous, this cannot but be helpful for the practitioner.

"And with the dentist sitting, instead of standing to work over his patient, his whole body is more nearly in balance instead of being constantly off balance as it must necessarily be when he stands."

Of the research which has been conducted on the sit-to-work theory, researcher Golden has commented: "Contrary to the common opinion, performance is not jeojardized when the patient is leaning back in comfort. Physiological processes are benefited by this position; energy is conserved; blood circulation is enhanced; the vertical position is the least economical of human energy and prolonged sitting in the upright position leads to early fatigue and an accompanying deterioration of the patient's performance.

"Ironically, while the profession is concerned to a man with the well-being of its members as well as their efficient performance in the interest of the public health service they are asked to do, 78 percent of the nation's dentists still stand at their work, increasing their own fatigue by so doing."

Reducing Movements

On the subject of reducing body and arm movements, Dr. Rex Ingraham, another of the principal investigators for the Human Factors Research Division, has observed that much must be done in this area to help the dentist conserve his working strength.

"For instance," says Dr. Ingraham, "we are hoping to see dental equipment designed so that the practitioner will be able to reach short distances for things, instead of long distances—and most certainly without turning, twisting body motions.

"There is a great deal of difference between reaching two-and-one-half feet or three feet for an air gun and picking up one that is only six inches away—

especially if you're doing this countless times in a single working day.

"In this connection, we are working on a manual which will suggest a set of compensatory exercises for a dentist—exercises which he can do for a few minutes at a time when he's taking a break from his chair. These exercises will help him compensate for the stress and strain which is borne repeatedly by certain muscles in the average day's practice."

On the subject of the chair-side assistant, the USC researchers say that not only training is important for the chair-side assistant—and, in fact, all assistants in the dentist's office—but assignment of responsibility as well.

To this end, the researchers at USC recommend strongly that each dentist have a manual for his office and operating help. In such a manual all duties and responsibilities would be carefully outlined as they apply to the dentist's particular situation.

In this way the assignment of responsibility is complete, say the Human Factors researchers. There is no saying "I didn't know I was supposed to do this" or "You didn't tell me that was a part of my responsibility." With such a manual, the responsibilities and duties of each assistant in the office will be clearly defined.

Adds Dr. Ingraham: "Today's dentist must have fully trained help. This will allow him to use the special talents and training that he has in the practice of his profession. Relieving the dentist of all routine will be one of the greatest single forward steps toward increasing his efficiency and helping him make the best possible use of his time in the interests of his patient.

"Nobody expects the president of a big company to do the filing; why should a dentist assume for himself any duty beyond the use of his talents in the able performance of his profession?"

Although the value of the chair-side assistant has long since ceased to be a matter of question with the profession, 30 percent of the nation's dentists still work alone—penalizing themselves and their patients with their slowness, say the Human Factors researchers.

Use of pre-set trays is another of the strong recommendations the Human Factors researchers are passing on to dentists practicing anywhere.

"This practice in the field of work-simplification

This scale model of a proposed dentist's office was built by HF to a scale of one-quarter inch to the foot. Observe the back-to-back arrangement of the two operating areas.

is not only a time-saver to the dentist, but a motion-saver as well," comments Dr. Ingraham. "It means a great deal to a practitioner to have all of the instruments needed for any particular operation spread right before him on the same tray—thus saving the necessity of reaching into cabinet drawers for them.

"Color-coding of all instruments takes this work-simplification a step further. Each instrument is coded by color for each step through any operation. The color-coding is of still further value to the assistants following sterilization in preparing new preset trays or putting instruments away."

Noise

What of dental instrumentation noise?

A pilot study in this field has been conducted by Dr. Aram Glorig of the Los Angeles Sub-Committee on Noise.

For a given day of varied operating procedures, it was found that the air rotor was on for 60 plus minutes and that the noise factor was 80 plus decibles—and NOT pathological.

It was recommended, however, that plain cotton be inserted into the ears of both the patient and the dentist for a 50 percent reduction in the noise.

It was recommended further that additional studies be made to probe the irritant factors of noise and its relation to the dentist, the dental assistant, and the patient.

Human Factors researchers at USC recently investigated business practices in the dentist's office.

Their first conclusion in this matter: The use of business machines for the processing of business records will save at least half of the time of one office girl. In the procedure being tested, a card and code number are assigned each patient. Cards are sent once each week to a service bureau from which statements are mailed regularly.

Work of the Human Factors Research Division is under the direction of Dr. Robert McNulty, the distinguished dean of the USC School of Dentistry.

In addition to Drs. Ingraham and Golden, other principal investigators for the HF project are Dr. Henry Tanner and Dr. Rene Eidson.

This picture looks into the HF laboratory and into some of the smaller areas enclosed inside the laboratory. Walls of the laboratory can be moved into different positions or removed entirely, as some of the panels have been for this picture. Here researchers test equipment and office layout as they seek new answers to the dentist's problems concerning space utilization and operative environment. Equipment was donated by dental manufacturers.

WAS I WRONG?

A dentist tells of his unconventional approach to winning a new patient, and the benefits that resulted to all concerned

AS TOLD TO CHARLES P. FITZ-PATRICK

I have known this 30-year-old service station operator for a number of years. In fact, he went to high school with one of my boys. Until recently, our relationship was simply that of a small businessman serving a more or less regular gasoline customer.

But a little over six months ago, Bill Smith, as I'll call him, became a patient of mine. This was not a voluntary decision of his but the result of my urging that he come to see me at my office. At that time he was in obvious need of professional dental attention. Fear, rather than lack of funds, had kept him away from a dental chair for 13 years.

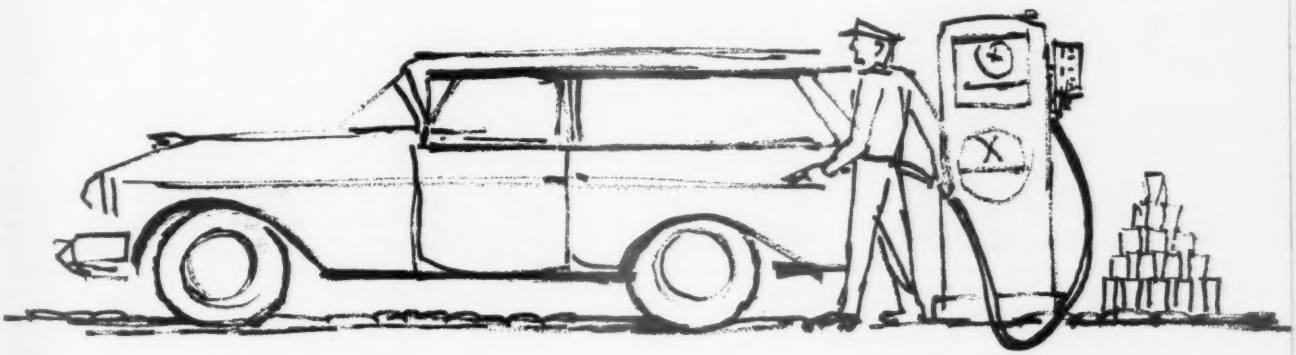
As I mentioned, he was a friend of my son. Consequently his dental health was sometimes mentioned to me by my boy. I agreed that Bill's business potentials could be jeopardized by his broken, blackened teeth staggered between gaps in his dental arch. His smile approached the gruesome. Yet he had a wealth of other qualities: good features, a crop of wavy hair, a pleasant disposition, and a real desire to be of service. But that smile!

So I introduced the subject of dental health into my now-and-then conversations with him. He knew I was a dentist. In his direct way, he admitted his fixation concerning dental operations, and I failed to "reach" him during several brief talks. Finally, he agreed to come to my office.

Results for Patient and Dentist

Today, Bill Smith has a smile that should help him win customers. He says he feels better mentally and physically and approaches motorists with new enthusiasm and confidence. But there is still the question of how I went about getting his name on my books. . . .

Actually, I made little or no money from the time-consuming dental work. I did not expect to, for I reduced fees because Bill Smith has a wife, three children, a large mortgage on his home, and a modest little business. Also, I short-changed myself on free time by fitting him into late evening hours so he would not have to be away from his business. The lack of financial return is outweighed by my



patient's new found pride in himself, conquering his fear of the dental chair is another plus factor he had never expected to experience.

All this has given me a feeling of accomplishment entirely different from that which follows most operations. I am convinced that my interest and cooperation will help this young businessman over some of the rough spots he'll meet while attempting to build his station into a volume dealership, and help him get more out of life generally.

When I questioned myself about the whole experience, I recall, probably with a purpose, that some of my really dedicated fellow practitioners have traveled to remote sections of the globe to serve those who need dental care. I remind myself that when the services of these dentists have been rebuffed, they have coaxed, pleaded, and even bribed their way toward the correction of the dental ills they discovered.

These same men—and the rest of us—when at home may look into the face of a fellow citizen, see obvious dental defects, and remain noncommittal. Of course, I am aware there are good reasons for this and I am not inclined to suggest any changes; but yet it puzzles me.

For instance, would a physician who saw a man with a broken arm ignore the condition—permit the victim to go on until he lost the use of the arm? Or isn't that an appropriate comparison?

Now I am aware that I could devote the balance of my professional life to the correction of dental faults and still not accomplish a great deal in proportion to the total dental burden that exists. But that was not my objective in winning Bill Smith as a patient. There were specifics involved.

For instance, I felt a close friendship for Bill Smith because of my son. I also was aware that a man required to meet the public day after day should make a good dental appearance if he hopes to be successful in his business. I was anxious that the station operator make a go of the venture into which he had put all of his modest financial reserve.

Collectively, these motives, plus the fact that part of my effort was educational, satisfy me that my actions were proper. But what would my fellow practitioners say? Was I wrong?

3841 Aspen Street
Philadelphia 4, Pa.

DENTAL LEADERS IN THE NEWS

Dr. Charles H. Patton of Philadelphia, orthodontist, who became the 102nd president of the American Dental Association.

Brigadier General Maurice C. Harlan, USAF, DC, Assistant Surgeon General for Dental Services, USAF. General Harlan's appointment was announced recently by Major General O. K. Niess, USAF Surgeon General. *(Official U.S. Air Force photograph)*

The new president of the American College of Dentists: Dr. Edgar W. Swanson, professor of operative dentistry and secretary of the faculty of the Dental School at Northwestern University.

FOR THE WAITING ROOM

REMOVE THIS SECTION

Oral Surgery

A thin, emaciated, middle-aged man walked into the dental office.

"My name's Fuller," he said to the dentist. "I only have three lower teeth. They're loose and they're killin' me. Take 'em out an' make me a plate. I've had it!"

The dentist said assuringly, "We'll do whatever we have to. And the first thing will be x-rays."

While taking the x-rays, the dentist took some history as well. He learned, among other things, that his patient never gained weight, although he ate heartily in spite of his missing teeth; and he was always tired, although his work did not cause his fatigue.

When he developed the x-rays, the dentist was surprised to find a pus-filled sac, or cyst. It was the size of a walnut, yet invisible to the naked eye. Its site was away from the loosened teeth, and might have gone undetected except for the x-ray procedure.

This diseased tissue was destroying the bone near the back portion of the lower jaw. It probably was a cause of the patient's impaired health. Eventually, it could lead to a fracture of the jaw because of the morbid bone condition.

"That cyst must be removed," the dentist told his patient. "And only an oral surgeon should do that job. So I'll refer you to a specialist. He'll do that operation, and he'll also extract those three teeth. When this has been done, you come back here and we'll see if we can't replace your missing teeth and get you in shape to digest your food properly."

Through the cooperation of the general practitioner and the specialist in oral surgery the patient regained his oral and general health. Without the professional alertness of the dentist and the specialized skill of the oral surgeon, the patient might have become a seriously sick man.

The general dentist is the backbone of the dental profession. Many dentists, products of modern dental training, do a great deal of oral surgery, especially the routine surgery of everyday practice. However, many dental diseases and conditions require the specialized know-how and exacting technic available only among dentists who have made oral surgery their specialty.

Today the oral surgeon is expert at surgical treatment of oral disease, at removal of growths, at correction of abnormalities, at reduction and treatment of fractures of the jaw, at extraction of unerupted, impacted and displaced teeth, and at treating post-operation complications.

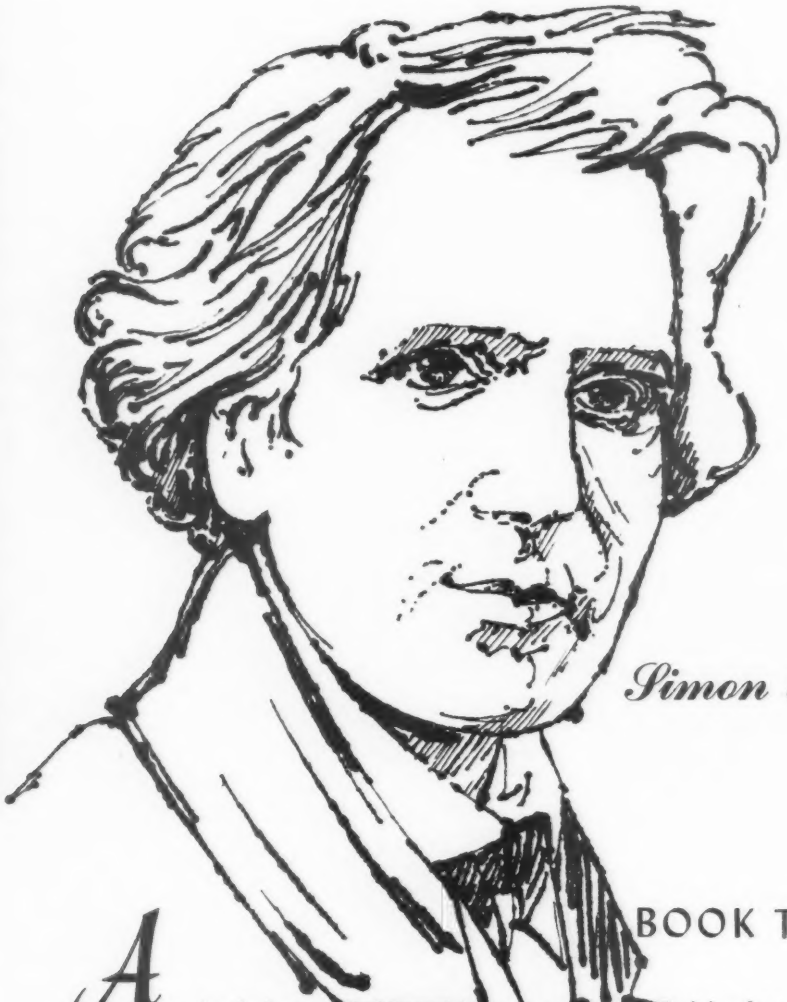
Oral surgery has made rapid progress in the last few decades. Much of this can be identified with the development of local anesthesia, the perfection of the x-ray, and the availability of other diagnostic aids. The oral surgeon became a better surgeon and a better diagnostician. He developed a wide variety of skills and technics to deal with hundreds of thousands of cases of jaw and teeth injuries stemming from automobile and industrial accidents that characterize our everyday life. World War II also challenged the ingenuity and experience of our oral surgeons as the wounded crowded the hospitals of all of our armed services. Antibiotics made it possible to perform surgery, often done in the field, much more safely, for these drugs cut the great toll of septic disease.

Today's young oral surgeon has at least three years of advanced professional training in his specialty. Most of that time was spent in clinical and technical aspects of oral surgery, and a specified amount was devoted to advanced study in biological sciences and hospital routine and organization.

As a resident in oral surgery in a hospital, he was associated with residents in medicine and residents in general surgery. He observed those staffs in their practices, and, like them, attended staff conferences at which the treatment of patients was reviewed and evaluated. The oral surgeon devotes all of his practice to surgery; that is, he specializes in that field. Thus he is uniquely equipped to understand the medico-dental problems that confront the modern American oral surgeon, the best-trained oral surgeon in the world.

Dentistry's Oldest Speciality

THE STORY O



Simon P. Hullihen

BOOK TWO: CHAPTER III

A crippled young man with meagre opportunities for education became America's first oral surgeon. Young Simon P. Hullihen, physically handicapped, but blessed with great digital dexterity, began to specialize in mouth surgery in his Wheeling, West Virginia, practice. He was but a youth of 22 when he received an honorary degree of doctor of medicine. Ten years later his reputation in the fields of both general and oral surgery had grown so great that the Baltimore Dental College conferred on him the honorary degree of doctor of dental surgery. He became the foremost man of his time in both these fields of surgery in the 19th century.

Oral surgery was practiced as early as the 17th century in Europe. In fact surgical operations on the jaws have been performed ever since medicine was first practiced. But much of modern oral surgery was made possible by the tremendous developments in anesthesia in the last hundred years. Operations that had been impossible before such developments, became quite routine. Mutilations of the face, quite common in the early days of such surgery, became avoidable because anesthetics and new technics made it possible to work inside the mouth.

ARABIAN NIGHTS IN DENTISTRY

ORAL SURGERY

TODAY either local or general anesthetics may be used in oral surgery. Local anesthesia requires the accurate placing of the drug near the proper nerve to anesthetize the portion of the mouth to be operated upon. General anesthesia may be either the inhalant type—most commonly nitrous oxide for oral surgery—or the intravenous type. In using the latter, the drug is given by means of a small needle slipped into a vein. Frequently, inhalant anesthesia is added after the patient falls asleep.

Along with modern anesthesia, the advent of x-ray pictures contributed much to the progress of modern oral surgery. The earliest use of roentgenograms in dentistry was primarily to guide dentists in the removal of impacted teeth. For the first time, they could actually see what had to be done surgically. Oral surgeons recognized the importance of routine x-ray pictures for diagnostic and operative use.

Because of these and other developments, today it is understood that "a correct diagnosis, based on complete examination and sound surgical judgment which has been developed through scientific knowledge and experience in the treatment of abnormal and pathologic conditions of the mouth, is the basis of all successful treatment and should be made before any operative procedure is undertaken."

The dentist who has been adequately trained in the principles of modern oral surgery and in their effective application is competent to make that correct diagnosis, to render the surgical service required, and to obtain the results sought.

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* Based upon notes developed by Leslie M. FitzGerald, D.D.S., Sc. D.

ANESTHESIA AND OPERATIONS

THE ORAL SURGEON has received specialized training in general anesthesia.

Either local or general anesthetics may be used in oral surgery. Local anesthesia requires the accurate deposition of the drug near the proper nerve so as to anesthetize the portion of the mouth to be operated upon.

General anesthesia may be either the inhalant type, most commonly nitrous oxide for oral surgery, or the intravenous type. When using intravenous anesthesia, the anesthetic drug is given by means of a small needle slipped into a vein. Frequently when this type of anesthesia is used, inhalant anesthesia is added after the patient falls asleep.

Dr. Niels Bjorn Jorgensen, distinguished authority on anesthesiology, lists five principles to be achieved by use of anesthetics in dental practice:

1. The mechanics of the injection must be accomplished painlessly.
2. Complete analgesia (imperviousness to pain) of the teeth should be obtained.
3. The proper drug must be selected.
4. Side effects must be avoided.
5. Premedication must be used where indicated to aid local anesthesia.

FOLLOWING SUCH RULES IN THE USE OF ANESTHETICS HAS TRANSFORMED DENTAL TREATMENT INTO A PAIN-FREE PROCEDURE IN THE OVERWHELMING MAJORITY OF CASES.

Dentistry Or VAUDEVILLE?

As the wife of a dentist, as his secretary, I feel called upon to express alarm over the push toward Vaudeville in the Dental Office. I might add that my attitude is hereditary, my father having been an M.D. who brooked nonsense from nobody, adults or children, but who won their lasting love and respect, nonetheless.

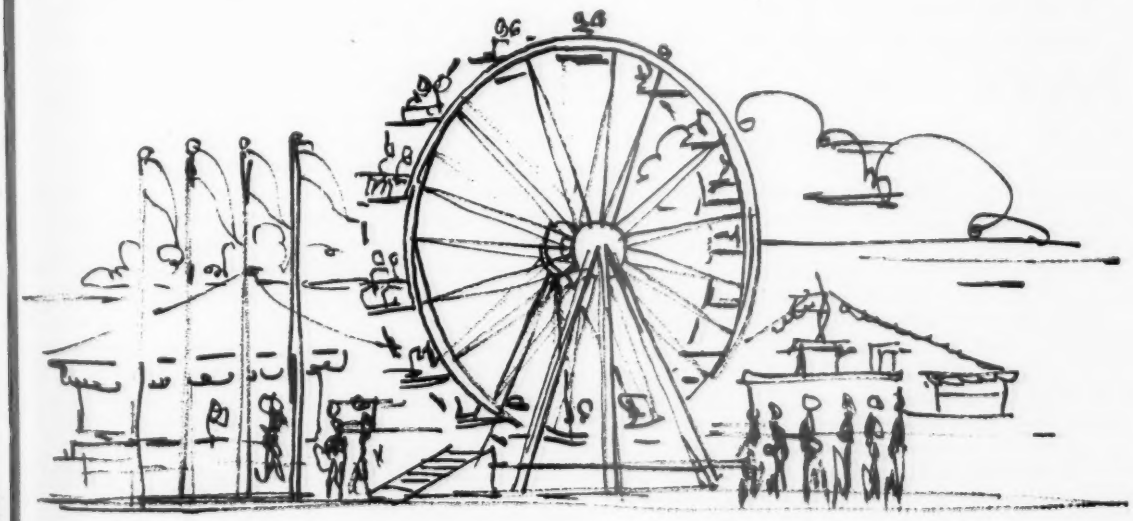
My role is purposely small in this office; I did not come prepared to lure the patients with Marilyn Monroe charms nor to undo Dr. Freud's teachings. The patients are met promptly and pleasantly, with personal remarks to those who are receptive and with quiet attention to children who are waiting their turns. In the business office which adjoins the operatory there is a little table, with drawing and cut-out material, where the little ones may sit within sight and hearing of all concerned. For the more active children, we have small toys. On the reception room table is a pretty packet of children's books, which, by the way, is ignored so long as there are dog-eared comics to be seen. The children seem to appreciate being left alone to color and cut without a personality-plus receptionist fussing around, and the mothers relax because the children are quiet for once. The half hour appointment is over before the child becomes apprehensive or bored.

Dr. G. is not a magician, so he has to forego sleight of hand for the children. He is not an athlete, so he uses his head for knowledge rather than for turning somersaults. Yet the children like him because he likes them. Those, however, that have been overentertained by the vaudeville-star dentists are apt to be uncooperative.

We cannot afford high-fidelity systems at the sacrifice of dental equipment. Nor do we have space for Bingo and pinball machines without leasing the Odd Fellows' Hall, which, I am afraid, would be unethical advertising. Yes, we are old-fashioned in clinging to the notion that people want dentistry in a dental office, that dentistry is a profession, not anything less, and that a man earns his Doctor of Dental Surgery because he is a scientist, not a clown.

Time may prove that people prefer ersatz to coffee, but so far we find that the sensible patient is bowled over and bewildered with all the vaudeville these days, and that he is grateful to sit in the chair of a man trained to the profession which, according to his sign, is dentistry.

R. S.



SALIVA AND DENTURE

CONCLUDING INSTALLMENT OF A THREE-PART SERIES By JOSEPH MURRAY, D.D.S.

In the previous installment we noticed that drugs or poisons, local irritations and inflammations, infectious diseases, and disturbances of the nervous system could induce increased salivary secretion or sialorrhea.

We were also informed that following the insertion of prosthetic appliances, especially full dentures, most patients are inconvenienced by an abnormal salivary flow. Dr. Lester W. Burket states that this annoying symptom disappears gradually within one or two weeks as the patient becomes accustomed to the dentures.

He feels that excessive salivation may cause drooling from the lips—with secondary skin changes which simulate angular cheilosis and the dermatitis associated with nutritional deficiencies.

These changes are seen particularly in denture-wearing patients in which the intermaxillary space has not been properly maintained. The swallowing of excess saliva may cause nausea and, at times, vomiting.

And, as we have noted from Dr. Joseph S. Landa's comments, the paradox exists where some patients will have a decreased salivation while others will have a hypersecretion of saliva due to the foreign-body action of the dentures.

Combating Dry Mouth

What is the solution for denture patients afflicted with salivary secretion-disturbances? It is of primary importance to establish the exact cause of the usually decreased salivary flow before therapy can be instituted.

If the dry mouth is associated with a nutritional deficiency, vitamin therapy should be helpful. Dr. Burket reports good results following the administration of nicotinic acid, 50 mg. three times daily. He has also found nicotinamide of value in stimulating salivary flow in patients with deficiencies in nutrition and those with temporary asialorrhea following non-specific forms of parotitis. If the secretory function of the glands has been lost, however, then this form of treatment is valueless.

Dr. Herman Prinz's formula for pilocarpine hydrochloride, which will stimulate salivary flow if the nerve pathways between the central nervous system and the salivary glands are still intact and possess secretory ability, has been recommended for dry mouth; but, since it is rare that xerostomia results from disturbances of inervation, the administration of this drug is not a panacea:

Rx Pilocarpine hydrochloride 0.3 cc.
Distilled water 15.0 cc.
Sig. Five drops in a little water 3 times a day after meals. Increase the dose every 3rd day by 1 drop until 8 to 10 drops per dose are taken.

It is Dr. Burket's opinion that symptomatic relief can be given to the patient with dry mouth in the following manner: Ordinary paraffin oil (Nujol), or 50 percent glycerine flavored with lemon oil, will relieve many of the annoying signs.

The denture-wearer suffering from xerostomia should coat his prosthesis with petrolatum, a lubricating jelly, or an adhesive denture powder.

These agents will assist in retention of the denture and reduce the mechanical irritation of the underlying tissues. In addition, petrolatum, almond oil, or cold cream is useful in lip lesions or irritations.

Dr. Burket also makes the observation that dry mouth, not due primarily to atrophy of the salivary glands, responds frequently to the administration of 100 mg. of nicotinic acid or its amide per day, for several weeks. The restored salivary flow has a soothing effect on the oral mucosa which is usually inflamed.

As a coincidence, it was found that nicotinic acid gave complete relief in some cases of trigeminal neuralgia, and every patient receiving this form of treatment improved. Doses up to 75 mg. nicotinic acid four times daily were used. Surprising enough, this form of therapy for tic douloureux has not received wide clinical usage.

Case Histories

Dr. Edward J. Mehringer discusses additional means for combating dryness in the oral cavity. In the case of a patient who was not helped by pilocarpine, a lemon-flavored synthetic saliva was substituted. This was sipped whenever the mouth felt dry. Although not completely successful, partial alleviation of the symptoms was noted.

In another instance, to induce salivation in a female patient, he prescribed five drops of a 2 percent pilocarpine solution, three times a day, before meals. The dosage was increased by one drop every eight days until eight drops were given, at which level the patient became more comfortable.

Stilbestrol was also given since xerostomia is frequently a sequel to menopause. With a slight increase in salivation, the local symptoms disappeared –the diagnosis was xerostomia, acute cheilitis with edema, reddening and desquamation, apthous stomatitis, edema of the tongue with fissuring and reddening and conjunctivitis–and the patient was placed under the surveillance of her local dentist.

One year later, she returned for consultation. There was no evidence of increased activity of lachrymal or salivary glands since her last visit. The patient stated that she was still dependent on the pilocarpine solution and stilbestrol to remain symptom-free.

The following formula was prescribed to stimulate the combined secretions of the parotid, the sublingual, and the submaxillary glands:

Citrocarbonate	2.4
Mucin	75
Urea	05
Methyl cellulose	1.2
Oil of lemon	106
Aqua qs ad	240

The methyl cellulose was used to retain moisture in the mouth, along with oil of lemon if flavoring is desired. This mixture provides a moistening, lubricating, and buffering effect during mastication.

The patient was instructed to dilute two to four tablespoonfuls with an equal volume of water and sip the mixture during mastication, or as needed, to maintain comfort.

Because of nutritional adequacy, the use of vitamin and mineral supplement was not warranted. The patient was instructed to continue home treatment and to return every four months for consultation.

Sore Mouth

Many a dental practitioner has been an eye witness to the development of sore mouths after the insertion of dentures. This phenomenon has occurred for no apparent reason; it is distressing to the patient and perplexing to the dentist.

Often there are no gross lesions, such as those encountered in the traumatic abrasion from overextended borders; but rather there is a general, vague and fleeting tenderness, one that is never in the same area twice.

Many reasons are given for such occurrences: idiosyncrasies in relation to the denture base material, occlusal prematurities, incorrect centric relation and vertical dimension, and so forth. These are all plausible and valid explanations, yet without much thought given to tissue tone and the function of the saliva.

This formidable diluting agent, secreted at the rate of 1,000 cc. to 1,500 cc. daily, has the remarkable ability to buffer foods during mastication to the narrow pH range of 6.5 to 8.0.

A depressed pH is the direct result of the activities of acidogenic organisms found in the mouth. However, the acids formed by such bacteria are easily diluted and neutralized by a normal saliva.

When the salivary flow is substantially impaired, the buffering factor is largely eliminated and the oral pH is depressed.

It has also been ably demonstrated that the pH is a salient factor in the irritability of nerve endings, which become more sensitive as the pH is lowered. Furthermore, with the decrease of saliva the integrity of all irritated tissues is diminished, thus rendering them more susceptible to infection.

Should an excessively mucous saliva be encountered, a normal saline rinse can be used to curb and remove the mucin from the mucosa prior to the insertion of dentures.

Also, before impression-taking some clinicians have obtained favorable results by having the patient rinse with an astringent mouth wash or with water to which some plaster of Paris has been added.

Dr. Mehringer suggests that the tendency toward a ropy saliva is usually the result of dietary imbalance or inadequacy, the adjustment of which, together with a vitamin and mineral supplement, is often sufficient to effect a more normal salivary secretion.

He advises that it is prudent to evaluate the degree to which dentures can fulfill a patient's esthetic, speech, and nutritional requirements; that where circumstances contraindicate the construction or wearing of dentures, a balanced mechanically soft diet can be maintained by means of food choppers, food blenders, juicers, and so forth.

He recommends that the dentist note the appearance of the mouth tissues since the integrity of the supporting structures is directly related to tolerance and comfort in the wearing of dentures:

"Furthermore, when the state of the oral tissues is suggestive of a subnormal salivary function, it is discreet to ascertain the character of the saliva and degree of flow before the natural teeth are removed

—where their removal is arbitrary and not a biologic necessity."

Dr. Mehringer cautions that since the saliva is essential in the attachment of the denture base to the mucosa, the extraction of teeth for esthetic reasons can be embarrassing and disconcerting if dentures cannot be worn comfortably because of impaired salivary function.

He feels that the prosthodontist may well regard such signs as redness, swelling, dehydration, and depressed oral pH as hazards and should be cognizant of the fact that the construction of dentures is but a single step in the management of the edentulous patient where such a syndrome exists.

Finally, the recording of the resting and stimulated salivary pH is a simple and reliable index of salivary function. Every dental practitioner should make this procedure part of his armamentarium.

1358 46th Street
Brooklyn 19, N. Y.

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THIS IS A STICKUP, *Doctor!*

By HAROLD J. ASHE

Perhaps you consider it a remote possibility you'll ever be robbed at gunpoint, doctor. Yet, because of unusual circumstances, you may be a prime target at some time in your life. Your profession may increase the hazard to which you're exposed. Your own carelessness may invite victimization.

As a dentist, your fees may be largely in cash. This fact may condition you to carrying relatively large sums of money on your person. Your banking practices may leave much to be desired. In your practice you may be held up. In your personal life you may be exposed to a stickup. You dress well, have an air of prosperity about you that may make you a likely prospect for a gunman. On your person you are likely to have valuable possessions aside from cash. On professional or personal trips, the car you drive may provide the means for a robber to escape.

Don't Invite a Holdup

Some persons who are held up are the victims of chance. They were at the wrong place at the wrong time. However, a good many victims invite robbery. They carry more funds on their person than needed, and they bank them infrequently. If this fact becomes common knowledge, it is a case of a victim in search of a robber. Sooner or later the two are likely to get together.

Some robbery victims take pride in carrying large sums of money and exercise this pride by carelessly displaying it. Some victims favor money clips which expose large amounts of money every time a purchase is made. The law of chance takes over.

Street Holdups

You may invite a robbery on the street on your way to and from a bank. If you take your unbanked receipts home with you, a holdup may result. Your habit patterns may prove your undoing. One businessman recently was followed from his place of business and held up in the driveway of his home. In the struggle he was seriously wounded. He might far better have hidden the money, after closing time, on his business premises. Better yet, a burglar alarm system could have been installed. Instead, he elected to make like an armored car!

One holdup victim for years followed the same daily route to his bank. A watch could be set by the time of his departure and arrival at his bank. Like many another holdup victim, he was highly unoriginal in his method of conveying bank deposits. He clutched in one hand a beat-up cigar box of long service. Only the most innocently naive and pure of heart could possibly think he was out for a stroll with his favorite box of cigars.

Other victims in search of a robber favor such containers as shopping bags, cartons, and large manila envelopes with tie cords. This is a common practice even by those depositors whose deposits are so small they could conveniently be concealed on their person. If you doubt this widespread practice, be observant the next time you're in a bank. Considering the glaring temptations advertised, you may even speculate as to why there aren't more stick-ups.

Check Losses

A major part of the loss in a street holdup of bank deposits may be in the form of checks. These should be endorsed for deposit only, rendering them valueless to a bandit. However, this precaution may still not insure recovery of checks, as, very likely, they'll be destroyed. If checks are numerous, you may be unable to recall some to mind, particularly if your office records don't show how fees were paid. To effect check recovery, makers must be asked to stop payment and issue new checks. To do so, a record must be kept of each maker's check by name and amount as a deposit slip is filled out.

Hitchhikers

Every year many incautious motorists lose their lives at the hands of hitchhikers. It is a fine trait to have compassion for people down on their luck,

but in picking up strangers you may expose yourself up for grave dangers. You may be setting yourself up for a robbery or, even worse, serious injury or death. Mingling with harmless hitchhikers seeking only a lift are desperate characters waiting a careless, charitable motorist. In one survey of hitchhikers made by a police department, it was found a large percentage of them had criminal records ranging from petty theft to major crimes of violence.

More Deadly Than the Male

Some of the most atrocious crimes have been, and will continue to be, committed by women. It's a naive motorist who'll assume there's no danger in giving a female a lift. Many senseless "thrill" killings have been perpetrated by women, some being teen-agers. Women often act as highway decoys for predatory males.

Keep Cool

If you are held up, try not to panic. Don't be defiant or provocative, and don't make threats about the consequences a gunman may expect. Many gunmen are amateurs, some are juveniles, and may be jittery. This should not be misinterpreted as lack of resoluteness or physical weakness. Some gunmen are under the influence of narcotics, are irrational and easily provoked to senseless violence. Some welcome violence, seeking only an excuse for it.

Don't Be a Hero

Except you're certain you are a victim of a "thrill" killer—and this is difficult to determine—it's unwise to fight back, even if you are armed. The life that may be lost may be your own. Equating your loss of cash only against your life isn't very attractive odds, is it?

If there are other people at or near the scene of a stick-up, an exchange of shots may result in injury or death to innocent third parties, perhaps from your gun. Even when spectators are out of the line of fire, ricocheting bullets may strike them.

Police have repeatedly urged that victims, faced with a gun, not attempt heroics.

Use Your Head

While a holdup is in progress, use your powers of observation. Apprehension of a robber and recovery of your money, car or other valuables may depend on how accurately you can describe the bandit. Determine his height and weight. Note any identification marks, natural or artificial, such as moles, scars, or tattoos. Color of hair and eyes is important. Wearing apparel should be noted. Even the voice and mannerisms may be helpful in later establishing identity. If there are two or more bandits, note any names they use. Without delay, get to a phone and call police. Don't stop to satisfy curious bystanders or friends. Delay works in favor of the bandit.

Do not, if you suspect the identity of the bandit, voice your suspicion of him. Even if you're wrong, he may not know that and it may convert a robbery into a murder—yours.

Some Do's and Don't's

Whether at your office or in personal activities there are several preventive measures you can take which may reduce the likelihood of a holdup.

Keep the car doors locked when traveling, particularly when a car is in stop-and-go night travel.

Bank receipts as often as practical.

Keep enough cash in the office and on your person only for normal needs.

So far as possible, pay by check.

Carry as little cash on your person as possible.

In traveling, use credit cards so far as practical in lieu of cash.

On out-of-town trips deposit the bulk of your cash with your hotel.

Don't flash money around.

Don't go "slumming" alone in strange cities, or with chance acquaintances of unknown character.

Don't—repeat, don't—ever pick up hitchhikers.

Don't, at night, stop on lonely stretches of road to make car repairs or adjustments that can be postponed until the next town or until you get home.

If, when in a strange town and alone, you develop chance acquaintances, leave them in the public places you found them—however harmless and charming they may appear to be.

Do patronize only reputable bars or places of entertainment.

Don't, in banking, develop a pattern as to time or route. Vary it.

If, occasionally, large sums of money must be kept in your office, don't keep it all in one place, and certainly not in an obvious one.

Finally, where chance acquaintances or hitchhikers are concerned, don't assume you can read character. Unfortunately, neither honesty nor dishonesty, neither gentleness nor brutality, are readily identifiable features of the human race.

HIDDEN MYSTERY

Mona of the puzzling smile,
You need not look so wise—
For I, being a woman,
Can read your sepia eyes!
For years wise men have wondered:
"What mystery lies beneath
The tight-lipped smile of Mona?"
My answer is: "POOR TEETH!"

Rosa Zagnoni Marinoni

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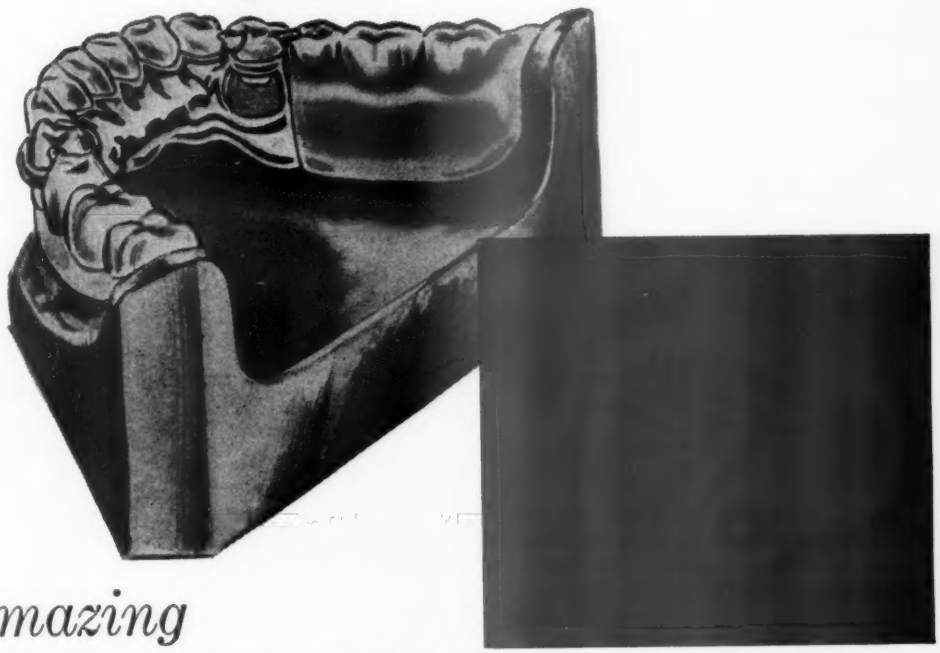

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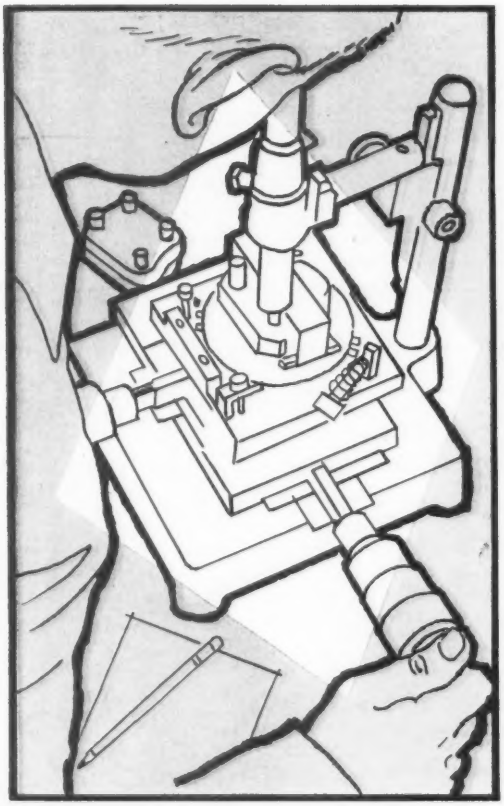

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